



AVOX Systems

Formerly Scott Aviation, Inc.

SERVICE INFORMATION LETTER

AVOX Systems Inc.

225 Erie Street • Lancaster, NY 14086-9502 • USA

Tel: 716-683-5100 • Fax: 716-681-1089 • Web Site: www.avoxsys.com

OXYGEN - ATA CHAPTER 35

VENDOR CODE: 53655

P/N 803661 SERIES – CONTINUOUS FLOW CONTROL REGULATOR ASSEMBLY

AVOX SYSTEMS RECOMMENDS FOR AN OVERHAUL:

- OVERHAUL PERIOD,
- MINIMUM NECESSARY PARTS TO REPLACE,
- KITS OF MINIMUM NECESSARY PARTS TO REPLACE, AND
- NECESSARY FUNCTIONAL TESTS AFTER AN OVERHAUL

1. BACKGROUND

This SIL recommends the overhaul period for the 803661 Series Continuous Flow Control Regulator Assemblies. This SIL identifies the minimum parts to replace during an overhaul. This SIL includes facts about kits that contain all of the minimum necessary parts to be replaced in an overhaul. This SIL gives information about functional testing required after an overhaul. This SIL does not change any procedures in the Component Maintenance Manual (CMM) except as noted.

You are given authority to make copies of this SIL and give them to other persons. If you make a copy of this SIL, you must make a copy of all of the SIL.

2. EFFECTIVITY

A. Aircraft

Any aircraft that uses the AVOX Systems or Scott Aviation 803661 Series Continuous Flow Control Regulator Assy.

B. Continuous Flow Control Regulator Assembly.

Any AVOX Systems or Scott Aviation 803661 Series Continuous Flow Control Regulator Assembly listed in Table 1.

C. Flow Control Regulators

(1) Flow Control Regulator part numbers that are affected by this SIL are listed in Table 1.

TABLE 1
AFFECTED FLOW CONTROL REGULATOR PART NUMBERS

803661-01	803661-03	803661-04
-----------	-----------	-----------

D. Component Maintenance Manual (CMM)

AVOX CMM 35-21-84 (current revision 1 dated May 30, 1990) is necessary to do an overhaul. After the CMM is revised to incorporate this SIL, this SIL will not be applicable to the CMM. See Section 7 of this SIL on how to contact AVOX Systems for revision status of technical publications.



AVOX Systems

Formerly Scott Aviation, Inc.

3. AVOX SYSTEMS RECOMMENDS FOR AN OVERHAUL:

A. Overhaul Period

- (1) Do an overhaul every five years for the 803661 Series Continuous Flow Control Regulator Assembly or more frequently.

B. Minimum Necessary Parts to Replace for an Overhaul

- (1) Overhaul Kit P/N 26968-01 contains the minimum necessary parts to replace for an overhaul of the 803661 Series Continuous Flow Control Regulator Assembly. You must replace other parts if they are defective.

NOTE: When overhauling any of the 803661 Series Flow Control Regulators, only 18 lock washers (IPL Item Numbers, 195, 265, 395, P/N 33460-070) will be needed.

C. Functional Tests that are Necessary After an Overhaul

You must do all the functional tests in the CMM after you do an overhaul on the 803661 Series Continuous Flow Control Regulator Assembly. You must follow all applicable procedures in the CMM when you do an overhaul. This SIL does not change the test procedures in the CMM.

4. ACCOMPLISHMENT INSTRUCTIONS

An overhaul must be done by personnel knowledgeable in the repair of high-pressure aviation oxygen equipment. An overhaul must be done in a facility that is approved for the repair of high-pressure aviation oxygen equipment. Contact AVOX Systems for locations of repair facilities authorized to repair AVOX oxygen equipment. See Section 7 of this SIL for contact instructions.

You must use all the necessary special tools and test equipment recommended in the CMM. Equivalent special tools and test equipment may be substituted. All tools and test equipment used to repair high-pressure aviation oxygen equipment must be calibrated. You must do the calibrations how and when your applicable national standards organization recommends. You must use tools that are clean for oxygen use.

- A. Use the CMM and this SIL to do an overhaul of the Continuous Flow Control Regulator Assembly.
- B. Write in your aircraft logs that an overhaul was done on the Continuous Flow Control Regulator Assembly.

TABLE 2
PARTS CONTAINED IN OVERHAUL KIT P/N 26968-01
FOR THE 803661 SERIES CONTINUOUS FLOW CONTROL REGULATOR ASSEMBLY
(Refer to Notes 1 through 3)

KIT ITEM NUMBER	PART NUMBER	IPL ITEM NUMBER	NOMENCLATURE	QUANTITY PER KIT
1	10001623	555	SEAT, VALVE	1
2	10001635	260	GASKET	1
3	18002-00	410	PACKING, PREFORMED (MS9068-012)	1
4	18008-00	370	PACKING, PREFORMED (MS9068-020)	1
5	18057-00	640	PACKING, PREFORMED (MS9068-028)	1
6	18062-00	505	PACKING, PREFORMED (MS9068-021)	1



TABLE 2 (Continued)
PARTS CONTAINED IN OVERHAUL KIT P/N 26968-01

KIT ITEM NUMBER	PART NUMBER	ITEM NUMBER	NOMENCLATURE	QUANTITY PER KIT
7	19486-00	235, 430	PACKING, PREFORMED	2
8	19487-00	460, 705	PACKING, PREFORMED (MS9068-908)	2
9	19488-00	420	PACKING, PREFORMED (MS9068-008)	1
10	24509-00	140	GASKET - COVER, CONT. FLOW CONTROL	1
11	25397-00	60	GASKET - VALVE LIFTER FLOW CONTROL	1
12	25530-02	590	ASSEMBLY, ORIFICE AND DIAPHRAGM	1
13	25736-00	300	WASHER SEAL, ACTUATION LEVER	1
14	33349-009	335, 470	SET SCREW	2
15	33460-071	210	WASHER, LOCK (MS35333-71)	2
16	33460-070	135, 295, 365	WASHER, LOCK (MS35333-70) (See Note 2.)	22
17	55619-00	565	PACKING, PREFORMED (3-5COMP77-545)	1
18	55620-00	655	PACKING, PREFORMED (2-15COMP77-545)	1
19	57173-00	65, 90	PACKING, PREFORMED (2-5COMP-S753-70)	2
20	58526-00	320	NUT, HEX MINIATURE	2
21	59317-00	525	BELLOFRAM - PRESSURE REDUCER	1
22	59333-00	575	PACKING, PREFORMED (2-29COMP-S604-7)	1
23	59334-00	645	BELLOFRAM - FLOW CONTROL	1
24	59776-00	440	BOSS SEAL (VD261-0109-0105)	1
25	800854-00	680	ASSEMBLY, SEAT AND GUIDE	1
26	803808-01	400	ASSEMBLY, MOLDED VALVE SEAT (See Note 3.)	1
27	8820-03	690	SCREEN, FILTER	1

Note 1: The overhaul kit contains the minimum necessary parts to replace in an overhaul of one 803661 Series Continuous Flow Control Regulator Assembly. Not all parts provided in the overhaul kit are required for the overhaul of an 803661 Series Flow Control Regulator. See Note 2. See Section 7 of this SIL for instructions to buy an overhaul kit.

Note 2: Only 18 Lock washers (135, 295, 365, IPL Figure 1, P/N 33460-070 [MS35333-70]) are required when overhauling an 803661 Series Flow Control Regulator. When overhauling an 803661 Series Flow Control Regulator, discard any unused lock washers.

Item Number 80, IPL Figure 1 was incorrectly shown as P/N MS3533-70 in Figure 1 of CMM 35-21-85. Item Number 80 should have been identified as P/N MS35333-70. After publication of CMM 35-21-84, Item 80, IPL Figure 1, (P/N MS35333-70) was deleted from the design. As a result, no replacement for this part is necessary.

(11, IPL Figure 1) P/N MS35333-70 is replaced by P/N 33459-040. P/N 33459-040 can be re-used if removed from the assembly.

Note 3: Molded Seat Valve Assembly P/N 803808-01 replaces Seat P/N 10007937 (400, IPL Figure 1).



5. DISASSEMBLY (Refer to IPL Figure 1 for item numbers in parentheses.)

NOTE: If removed during disassembly, discard and replace the following parts: Pressure Reducer Seat Valve (555), Gasket (260), Preformed Packing (410, 370, 640, 505, 235, 430, 460, 705, 420), Gasket Cover (140), Valve Lifter Flow Control Gasket (60), Orifice Assembly (590), Actuation Lever Seal Washer (300), Set Screw (335, 470), Lock Washer (210, 80, 135, 295, 365), Preformed Packing (565, 655, 65, 90), Hex Nut (320), Pressure Reducer Bellofram (525), Preformed Packing (575), Flow Control Bellofram (645), Boss Seal (440), Seat and Guide Assembly (680), Seat (400), Filter Screen (690).

A. The following supersedes Paragraph 5 of Overhaul Manual 35-21-84, (Page 301).

- (1) Unthread and remove button (75). If present, remove and discard washer (80). Then remove spring (85) and plunger (95). Remove packing (90) from plunger (95).

B. The following supersedes Paragraph 25 of CMM 35-21-84, (Page 302).

- (1) Unthread and remove plug (425); then remove packing (430) from end of plug (825). Do not remove filter (445) from body assembly (730). Remove union (435), seal (440) and filter (690) from body assembly (730).

6. ASSEMBLY (Refer to IPL Figure 1 for item numbers in parentheses.)

A. The following supersedes Paragraph 2.C of Overhaul Manual 35-21-84, (Page 702).

NOTE: If washer (80) has been removed earlier, do not replace the washer onto end of plunger (95).

- (1) Place plunger (95) with packing (90) installed through cover subassembly (125 or -125A). Place spring (85) in place and thread button (75) onto plunger (95) after applying a coat of Loctite, Grade C, to threads of plunger (95).

B. The following supersedes Paragraph 9 of CMM 35-21-84, (Page 704).

- (1) Install filter (690) and screen (695) into body assembly (730).

7. TO CONTACT AVOX SYSTEMS:

A. To get an overhaul of a 803661 Series Continuous Flow Control Regulator Assembly or to have it repaired, contact any AVOX Authorized Repair and Overhaul Facility. Refer to the AVOX web site (www.avoxsys.com) for a list of authorized facilities.

B. To buy kits or parts, contact any AVOX Authorized Distributor. Refer to the AVOX web site (www.avoxsys.com) for a list of distributors.

C. To get technical aid, contact the AVOX Technical Support Department.

- Telephone: 1-716-683-5100
- Fax: 1-716-681-1089
- E-Mail: avoxcs@avox.zodiac.com



AVOX Systems

Formerly Scott Aviation, Inc.

7. TO CONTACT AVOX SYSTEMS (Continued)

D. To get a copy of the CMM or the revision status of a publication, contact the AVOX Technical Publications Department. Give the aircraft model when you send an order for a CMM copy.

- Telephone: 1-716-683-5100
- Fax: 1-716-681-1089
- E-Mail: avoxtechpub@avox.zodiac.com
- Publications Index: log onto www.avoxsys.com; click on Aviation/Government Products, click on Aviation Product Information, click on Technical Product Information

Note: The steps to get the Publications Index from the AVOX Systems web site can and will change in the future because of changes to the web site.